

“6. Lastly, it is inferior in the quality of its timber to the last-named species.

“Now of the *Pinuses* above enumerated as existing in southern Europe, the *Abies pectinata* is the one which seems best to accord with the above description, especially when we add that Pliny (lib. xvi. c. 38) describes it as having its leaves indented like the teeth of a comb, which may be regarded as expressive of one of the generic distinctions between the *Abies* and *Pinus* of modern botanists.

“But we must not expect from this author, or indeed from any of those of antiquity, the same precision as is demanded from modern botanists in such matters. Probably the two lines in Virgil’s 7th Eclogue, v. 65—

‘*Fraxinus in silvis pulcherrima, Pinus in hortis,
Populus in fluviis, Abies in montibus altis,*’—

expressed the amount of discrimination which the Romans exercised in such matters; so that not only the *Abies pectinata*, but any other resinous tree, with narrow pointed leaves, growing in mountainous places, attaining to a great height, and serviceable for timber, would have been included by them under the name of *Abies*.”

The whole volume consists of similar discussions, and therefore does not admit of extract. It is sure to attract the attention of all who take any interest in the identification of ancient trees with those at present known, and must tend to correct many of the mistaken views now held by scholars concerning them.

The Record of Zoological Literature. 1864. Vol. I. Edited by ALBERT C. L. G. GÜNTHER, M.A., M.D., Ph.D., F.Z.S., &c. Van Voorst, 1865.

The difficulties which the naturalist has to encounter who is anxious to ascertain what has already been written on any special subject are continually becoming greater. Each year adds enormously to the aggregate of zoological literature; and from the work before us we learn that not less than 25,000 pages were, during the year 1864, devoted to the history of recent Zoology alone. Can we be surprised that genera and species have often again and again been redescribed, and that the lists of synonyms are often so long, when we bear in mind that naturalists engaged in identical pursuits are continually publishing their supposed discoveries in almost every language and every country in the world, and that the descriptions of species are, for the most part, not in monographs of particular sections of Zoology, but in the proceedings of some learned society, or the pages of some little-known periodical. Every zoologist must have frequently felt the great want of some guide, the references in which should act as fingerposts to point to him the directions in which he would be likely to obtain information respecting the object of his inquiry. True he has not been without some such guides; but they have been but inefficient. Engelmann’s ‘*Bibliotheca Historico-Naturalis*’ and Carus’s and Engelmann’s ‘*Bibliotheca Zoologica*,’ as well as Agassiz’s ‘*Bibliographia Zoologiæ et Geologiæ*,’ have been and must remain of great value; but they none of them bring

the bibliography down to the present time, and, moreover, they only give the titles of books and papers, and, as a general rule, give little or no idea of the contents. The thing which every student must have felt the want of is a synopsis of zoological publications, which should be issued frequently, so as continually to keep pace with the progress of science. Attempts have been made in this direction. The 'Reports on the Progress of Zoology,' at one time published by the Ray Society; the "Notices of Serial Publications," in the first series of the 'Natural History Review,' and the "Zoological Bibliography" of the second series of the same work, and, last but not least, the annual "Bericht" in the 'Archiv für Naturgeschichte,' have all been of greater or less use, but have fallen very short of what was required. At length, however, the desideratum is supplied, and most heartily do we welcome the first volume of 'The Record of Zoological Literature.'

Dr. Günther is so well known, and the care and accuracy which characterize all his writings are so fully acknowledged, that the very mention of his name as Editor of the 'Record' will be a sufficient guarantee to our readers that the work will be energetically and ably conducted. "The object of the 'Record,'" as given in Dr. Günther's own words, "is to give, in an annual volume, reports on, abstracts of, and an index to, the various zoological publications which have appeared in the preceding year; to acquaint zoologists with the progress of every branch of their science in all parts of the globe; and to form a repertory which will retain its value for the student in future years." The editor is aided in the work which he has undertaken by an able staff of coadjutors, each of whom is well versed in that branch of Zoology which is more especially entrusted to his care. The several classes are thus apportioned among the contributors.

The EDITOR himself reports on the Mammalia, the Reptilia, and the Pisces.

ALFRED NEWTON, M.A., F.L.S., &c., takes charge of the Aves.

EDUARD VON MARTENS, M.D., C.M.Z.S., the Mollusca.

J. REAY GREENE, B.A., the Molluscoida, Rotifera, Annelida, and Echinodermata.

C. SPENCE BATE, F.R.S., the Crustacea.

W. S. DALLAS, F.L.S., &c., the Arachnida, Myriopoda, and Insecta.

T. SPENCER COBBOLD, F.R.S., the Helminthes.

The gentleman to whom was intrusted the Record of the Cœlenterata and Protozoa failed to keep his engagement; and the report, therefore, on these classes has been, we find, unfortunately deferred to the second volume.

A few rules have been drawn up for the guidance of the contributors, in order to secure a near approach to uniformity in the Records; and as these will further elucidate the aim and scope of the work, we give them here entire.

"1. To commence each Record with a *list of the various publications*, arranged chronologically, systematically, or alphabetically, with such remarks on their object, extent, and nature as cannot well be embodied in the special part of the Record. The student should

be fully informed what he may expect to find in the work or memoir, and the Recorder may add any critical remarks which he thinks necessary for the object in view.

“ 2. To arrange the contents of all the publications *systematically* in the second, *special part* of the Record. This part will contain almost all the abstracts of memoirs and papers, new systematic arrangements, and discoveries. Papers difficult of access to the generality of zoologists to be given more in detail than others.

“ 3. Of new genera short diagnoses are to be given, if, in the opinion of the Recorder, such genera are likely to take a place in the system, whilst the names only of subgeneric divisions”—those abortions of science!—“are mentioned. All species described as new, with their habitats, and emended descriptions of known ones, are to be enumerated, with exact references to the several works and mention of accompanying illustrations. Diagnoses of new species to be given only when they are described in a journal or work difficult of access.

“ 4. The titles of anatomical papers to be given ; but only those to be more specially treated which have a direct bearing on the classification, specific definition, or the life-history of an animal.

“ 5. The boundary-line between popular and scientific literature having become of late rather indefinite, such popular publications to be mentioned as deserve attention by their tendency to promote scientific knowledge, directly or indirectly.”

The result of the joint labours of the contributors is a thick octavo volume of more than 600 pages, containing an immense amount of well-digested matter. It astonishes us to find the progress which is now being made in the investigation and description of the entire animal kingdom throughout the world. We have skimmed through the pages of this volume for the purpose of ascertaining the number of *genera* which have been described in the year 1864, and we find that they amount to 948. This immense addition to the generic nomenclature is thus distributed among the primary divisions of Zoology :—

Mammalia	26	Insecta :—	
Aves	22	Coleoptera	285
Reptilia	33	Hymenoptera	13
Pisces	43	Lepidoptera	216
Mollusca	47	Diptera	123
Molluscoida	4	Neuroptera	7
Crustacea	25	Orthoptera	13
Arachnida	10	Rhynchota	49
Myriopoda	6		<hr/>
			706
Rotifera	0		
Annelida	20		
Helminthes	0		
Echinodermata	6		

Where all have so well executed the charge taken in hand, we are unwilling to say anything either of praise or blame respecting the in-

dividual work of the contributors. We feel bound, however, to suggest that Dr. von Martens should be kept better informed in future as to what has been published on the Mollusca in Great Britain. No allusion whatever is made in his report to the second volume of Jeffreys's 'British Conchology',* nor to the elaborate "Report of the Mollusca of the West Coast of North America," by Mr. P. Carpenter, published in the 'Reports of the British Association.' Moreover Messrs. Alder and Hancock's anatomical and descriptive account of the "Nudibranchiate Mollusca of India," which is most carefully worked out and beautifully illustrated (Trans. Linn. Soc.), is passed by without a comment; and the reader would suppose, from appended observations, that a much less important paper of Angas and Crosse "On the Nudibranchiata of Port Jackson" was the more valuable contribution to science. We are at a loss, moreover, in Dr. von Martens's report, to know which of the species mentioned are new to science and which are not so.

In undertaking a report on the Insecta, Mr. Dallas bent his back to a giant's labour, and well he has borne it. No less than 256 pages are occupied by his report, and yet no portion of the volume gives evidence of greater care, has its matter in more closely condensed form, or, we may add, is more methodically and clearly analyzed and arranged.

We look upon the production of the present volume as of the very highest importance. It is an honour to the country in which it is published. It reflects still greater honour upon Dr. Günther and his brother labourers who have originated the 'Record.' Let our readers bear in mind that such a work as this is cannot be carried on unless it has a large sale. We do not think that we shall be stating the case too strongly if we say that every one interested in the progress of our science ought to be a purchaser of the 'Zoological Record' as a matter of duty, even if it should not be to him—as it can scarcely fail to be—a matter of self-interest.

Dr. Günther requests in his preface "suggestions which may tend to the improvement and perfection of the 'Record;'" here, then, are one or two trifles:—

1. That the exact date—that is, the month and day—when a paper is read or published should, where practicable, be given. This has been done by some of the contributors, but not by all.

2. That the names of new genera should be printed in a distinctive type, and should always commence a sentence, and not be for the first time introduced in the middle of a paragraph—for example, compare pages 308 and 408.

3. That an index be given of all the new genera described during the year. This would be of great use for the student who wishes to ascertain whether a name which he is about to propose is preoccupied or not.

The Rev. W. A. Leighton, F. L. S., is preparing for publication a Synopsis of British Lichens.

* We have since noticed that this volume, which was published in the middle of the year 1864, nevertheless bears the date 1863 on the title-page. This circumstance may perhaps have misled Dr. von Martens.